Version 1.3

Revision Date 06/23/2015

Zepinc

Print Date 02/29/2016

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Material name	:	"CALCIUM, LIME & RUST CLR "	
Material number	:	CACAL32	
Manufacturer or supplier's d	eta	ils	
Company	:	Zep Inc.	
Address	:	1310 Seaboard Industrial Blvd., NW Atlanta, GA 30318	
Telephone	:	404-352-1680	

Emergency telephone numbers

For SDS Information	:	Compliance Services 1-877-428-9937
For a Medical Emergency	:	877-541-2016 Toll Free - All Calls Recorded
For a Transportation	:	CHEMTREC: 800-424-9300 - All Calls Recorded.
Emergency		In the District of Columbia 202-483-7616

Note: This product is labeled as a consumer product in accordance with the United States Consumer Product Safety Commission regulations. The warnings presented below in this Safety Data Sheet (SDS) comply with the 2012 OSHA Hazard Communication Standard (GHS - Globally Harmonized System of Classification and Labeling). The requirements for the labeling and warnings of consumer products may differ from those required for GHS based hazard communication.

SECTION 2. HAZARDS IDENTIFICATION

Emergency Overview

Appearance	liquid
Colour	light yellow
Odour	pungent

GHS Classification

Skin corrosion Serious eye damage	: Category 1A : Category 1
GHS Label element	
Hazard pictograms	
Signal word	: Danger
Hazard statements	: H314 Causes severe skin burns and eye damage.
Precautionary statements	: Prevention: P264 Wash skin thoroughly after handling. P280 Wear protective gloves/ protective clothing/ eye protection/ face protection. Response:



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	P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. P303 + P361 + P353 IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/	
	 shower. P304 + P340 + P310 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor/ physician. P305 + P351 + P338 + P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/ physician. P363 Wash contaminated clothing before reuse. Storage: P405 Store locked up. Disposal: Dispose of contents/container in accordance with local 	
	regulation.	
Potential Health Effects		
Carcinogenicity:		
IARC	No component of this product present at equal to 0.1% is identified as probable, p human carcinogen by IARC.	
ACGIH	No component of this product present at equal to 0.1% is identified as a carcinoge carcinogen by ACGIH.	
OSHA	No component of this product present at equal to 0.1% is identified as a carcinoge carcinogen by OSHA.	
NTP	No component of this product present at equal to 0.1% is identified as a known or by NTP.	

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Hazardous components

Chemical Name	CAS-No.	Concentration [%]
urea hydrochloride	506-89-8	>= 5 - < 10
sulphamidic acid	5329-14-6	>= 1 - < 5
Alcohols, C10-14, ethoxylated	66455-15-0	>= 1 - < 5
2-HYDROXYETHANOIC ACID	79-14-1	>= 1 - < 5
citric acid	77-92-9	>= 1 - < 5

SECTION 4. FIRST AID MEASURES

General advice

Move out of dangerous area.
 Consult a physician.
 Show this safety data sheet to the doctor in attendance.
 Do not leave the victim unattended.



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If inhaled :	If unconscious place in recovery position advice. If symptoms persist, call a physician. Move to fresh air. Oxygen or artificial respiration if needed	
In case of skin contact :	Immediate medical treatment is necessar wounds from corrosion of the skin heal s difficulty. Take off contaminated clothing and show Wash contaminated clothing before re-u If skin irritation persists, call a physician Wash off immediately with plenty of wate minutes. Thoroughly clean shoes before reuse.	slowly and with es immediately. ise.
In case of eye contact :	Small amounts splashed into eyes can on tissue damage and blindness. Continue rinsing eyes during transport to Remove contact lenses. Protect unharmed eye. Keep eye wide open while rinsing. If eye irritation persists, consult a special If in eyes, rinse with water for 15 minute	o hospital. Ilist.
If swallowed :	Keep respiratory tract clear. Never give anything by mouth to an unc If symptoms persist, call a physician. DO NOT induce vomiting unless directer physician or poison control center. If conscious, drink plenty of water. Take victim immediately to hospital.	

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SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media	:	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Unsuitable extinguishing media	:	High volume water jet
Specific hazards during firefighting	:	Do not allow run-off from fire fighting to enter drains or water courses.
Hazardous combustion products	:	Chlorine compounds Carbon dioxide (CO2) Carbon monoxide Sulphur oxides Smoke Nitrogen oxides (NOx)
Specific extinguishing methods	:	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Further information	:	Collect contaminated fire extinguishing water separately. This must not be discharged into drains.



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	Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.	
Special protective equipment for firefighters	: Wear self-contained breathing appa necessary.	ratus for firefighting if

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	: Use personal protective equipment.
Environmental precautions	: Prevent product from entering drains. Prevent further leakage or spillage if safe to do so. If the product contaminates rivers and lakes or drains inform respective authorities.
Methods and materials for containment and cleaning up	: Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Keep in suitable, closed containers for disposal.

SECTION 7. HANDLING AND STORAGE

Advice on safe handling :	Do not breathe vapours/dust. Avoid contact with skin and eyes. For personal protection see section 8. Smoking, eating and drinking should be prohibited in the application area. To avoid spills during handling keep bottle on a metal tray. Dispose of rinse water in accordance with local and national regulations.
Conditions for safe storage :	Keep container tightly closed in a dry and well-ventilated place. Observe label precautions. Electrical installations / working materials must comply with the technological safety standards.
Materials to avoid :	Oxidizing agents Keep away from metals. Store and keep away from bases and alkalies.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Contains no substances with occupational exposure limit values.

Personal protective equipment

Respiratory protection : In case of insufficient ventilation, wear suitable respiratory equipment.

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Hand protection		
Remarks	: The suitability for a specific workpl with the producers of the protective	
Eye protection	: Safety goggles Ensure that eyewash stations and the workstation location.	safety showers are close to
Skin and body protection	: Impervious clothing Choose body protection according to the amount and concentration of the dangerous substance at the work place.	
Hygiene measures	: When using do not eat or drink. When using do not smoke. Wash hands before breaks and at the end of workday.	

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	:	liquid
Colour	:	light yellow
Odour	:	pungent
Odour Threshold	:	No data available
рН	:	< 1
Melting point/freezing point	:	Not applicable
Boiling point	:	100 °C
Flash point	:	
		does not flash
Evaporation rate	:	No data available
Upper explosion limit	:	No data available
Lower explosion limit	:	No data available
Vapour pressure	:	No data available
Relative vapour density	:	No data available
Density	:	1.067 g/cm3
Solubility(ies)		
Water solubility	:	soluble
Solubility in other solvents	:	not determined
Partition coefficient: n- octanol/water	:	No data available
Auto-ignition temperature	:	not determined
Thermal decomposition	:	No data available
Viscosity		
Viscosity, kinematic	:	No data available





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SECTION 10. STABILITY AND REACTIVITY

Reactivity	: Stable
Chemical stability	: Stable under normal conditions.
Possibility of hazardous reactions	: No decomposition if stored and applied as directed.
Conditions to avoid	: Extremes of temperature and direct sunlight.
Incompatible materials	: Oxidizing agents Organic materials Metals Bases
Hazardous decomposition products	 Carbon oxides Chlorine Nitrogen oxides (NOx) Sulphur oxides Ammonia gas may be liberated at high temperatures.

SECTION 11. TOXICOLOGICAL INFORMATION

Acute toxicity

Product:

Acute oral toxicity : Acute toxicity estimate : 4,624 mg/kg Method: Calculation method

Skin corrosion/irritation

Product:

Remarks: Extremely corrosive and destructive to tissue.

Serious eye damage/eye irritation

Product:

Remarks: May cause irreversible eye damage.

Respiratory or skin sensitisation

No data available

Germ cell mutagenicity

No data available

Carcinogenicity

No data available

Reproductive toxicity



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No data available

urea hydrochloride: sulphamidic acid: Alcohols, C10-14, ethoxylated: 2-HYDROXYETHANOIC ACID: citric acid:

STOT - single exposure

No data available

STOT - repeated exposure

No data available

Aspiration toxicity

No data available

Further information

Product:

Remarks: No data available

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

No data available

Persistence and degradability

No data available Bioaccumulative potential

Product:

Partition coefficient: n- octanol/water Components:	:	Remarks: No data available
2-HYDROXYETHANOIC ACID	:	
Partition coefficient: n- octanol/water	:	log Pow: -1.11

Mobility in soil

No data available

Other adverse effects

No data available

Product:

Regulation

Remarks

Substances
This product neither contains, nor was manufactured
with a Class I or Class II ODS as defined by the U.S.
Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A
+ B).

Stratospheric Ozone - CAA Section 602 Class I

40 CFR Protection of Environment; Part 82 Protection of





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Additional ecological information

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: No data available

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods	
Waste from residues	 Do not dispose of waste into sewer. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of in accordance with local regulations.
Contaminated packaging	 Empty remaining contents. Dispose of as unused product. Do not re-use empty containers.

SECTION 14. TRANSPORT INFORMATION

Transportation Regulation: 49 CFR (USA): ORM-D, CONSUMER COMMODITY

Transportation Regulation: IMDG (Vessel): UN3264, CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S., (SULFAMIC ACID), 8, II - Limited quantity

Transportation Regulation: IATA (Cargo Air): UN3264, Corrosive liquid, acidic, inorganic, n.o.s., (SULFAMIC ACID), 8, II - Limited quantity

Transportation Regulation: IATA (Passenger Air): UN3264, Corrosive liquid, acidic, inorganic, n.o.s., (SULFAMIC ACID), 8, II - Limited quantity

Transportation Regulation: TDG (Canada): UN3264, CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S., (SULFAMIC ACID), 8, II - Limited quantity

SECTION 15. REGULATORY INFORMATION

EPCRA - Emergency Planning and Community Right-to-Know Act

CERCLA Reportable Quantity

Components	CAS-No.	Component RQ (lbs)	Calculated product RQ (lbs)
HYDROCHLORIC ACID	7647-01-0	5000	*

*: Calculated RQ exceeds reasonably attainable upper limit.

SARA 304 Extremely Hazardous Substances Reportable Quantity



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This material does not o	ontain any components with a section 304 EHS	S RQ.		
SARA 311/312 Hazard	s : Acute Health Hazard			
SARA 302	: No chemicals in this material are subj requirements of SARA Title III, Sectio			
SARA 313	: This material does not contain any ch known CAS numbers that exceed the reporting levels established by SARA	threshold (De Minimis)		
California Prop 65	This product does not contain any che California to cause cancer, birth defec reproductive harm.			
The components of this product are reported in the following inventories:				
TSCA DSL	On TSCA Inventory This product contains one or several compone Canadian DSL nor NDSL.	ents that are not on the		
AICS NZIoC PICCS IECSC	Not in compliance with the inventory Not in compliance with the inventory Not in compliance with the inventory Not in compliance with the inventory			
	1			

Inventory Acronym and Validity Area Legend:

AICS (Australia), DSL (Canada), IECSC (China), REACH (European Union), ENCS (Japan), ISHL (Japan), KECI (Korea), NZIOC (New Zealand), PICCS (Philippines), TCSI (Taiwan), TSCA (USA)

SECTION 16. OTHER INFORMATION



OSHA GHS Label Information:



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Hazard pictograms		
Signal w ord Hazard statements Precautionary statements	 Danger: Causes severe skin burns and eye damage. Prevention: Wash skin thoroughly after handling. Wear clothing/ eye protection/ face protection. Response: IF SWALLOWED: Rinse mouth. Do NOT inchair): Remove/ Take off immediately all contaminated ck show er. IF INHALED: Remove victim to fresh air and ket comfortable for breathing. Immediately call a POISON C IN EYES: Rinse cautiously with water for several minute present and easy to do. Continue rinsing. Immediately c doctor/physician. Wash contaminated clothing before restorage: Store locked up. 	duce vomiting. IF ON SKIN (or othing. Rinse skin w ith w ater/ ep at rest in a position ENTER or doctor/physician. IF s. Remove contact lenses, if all a POISON CENTER or euse.

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